

AESO initiatives to keep Edmonton the hub of Alberta's electrical grid

As a major source of electricity generation in the province, as well as a key hub for major transmission paths, the Edmonton region is a lynchpin of Alberta's electrical grid. The Alberta Electric System Operator (AESO) is committed to maintaining the Edmonton region's high-priority status over the next decade, and beyond, with significant infrastructure upgrades that will support further electricity development in the area — as well as power requirements elsewhere.

The AESO, a not-for-profit organization, plans and manages the safe, reliable and economic operation of the Alberta Interconnected Electric System, and keeps a close watch on the provincial transmission system's ability to meet the needs of Albertans.

The Edmonton region currently provides 34 per cent, or 4,457 megawatts (MW), of Alberta's capacity for electrical generation, much of it originating from coal-fired plants in the Wabamun Lake area. As per its draft 2011 Long-term Transmission Plan (the Plan), the AESO expects an increasing appetite for electricity in the Edmonton region — a bump of about 33 per cent over the next decade — due largely to residential and commercial growth.

"The Edmonton region is a major corridor for electricity flow between the Northeast, Central and South regions," says AESO Vice-President of Transmission Shan Bhattacharya. "Upgrades are necessary to service increasing demand and account for the power requirements of major oil production facilities in the Northeast which can have a significant impact on transmission infrastructure in the Edmonton region. We also have to take into account the aging infrastructure in the City of Edmonton that needs replacement over the next decade," adds Bhattacharya.

The AESO's draft 2011 Plan calls for a new transmission line in northeast Edmonton and St. Albert, various upgrades between Wabamun and Edmonton to alleviate system constraints, a new substation and line enhancements in the Leduc area, and the installation of higher-capacity cables near the University of Alberta, among other initiatives.

For more information about the AESO's draft 2011 Plan or the need for transmission upgrades in Alberta, visit www.poweringalberta.com